ABSTRACT OF THE DISCLOSURE

A wideband device modeling method comprises using ultra-short time-domain impulse responses measurement and using a subsequent extraction of said ultra-short time-domain impulse responses measurement. The wideband device

5   modeling method in the invention is to provide a model that could faithfully describe an ultra-short TD response and would conform to the wideband consideration. An ultra-short impulse with tens of pico-second width has been used in this work for characterizing the TD responses of the devices. Moreover, the wideband device modeling method in the invention is to provide a layer

10   peeling technique, widely used in characterizing PCB interconnection or package, is mixed with a conventional spiral inductor physical model. The wideband device modeling method in the invention also provides an extension equivalent circuit combined with the BSIM3v3 model.